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by their genealogies and by the idea of rank based on male primogeniture and they introduced ancestor worship into Lau.[18]

The aborigines and their descendants, however, kept most of the land, their food-producing patterns, and their basic ecological adjustment to the environment. They also kept their nature religion, related to that adjustment, and many of their traditional attitudes and values. In time manioc and sweet potato, exotic food plants which made gardening possible to a limited extent on the limestone islands, found their way into Lau, allowing an increase in food production and population. Gradually, on the basis of ancient structures, the ecological and cultural pattern of the area developed a new balance. Although Tongan and European influences have somewhat altered it in recent years, in that warfare has ceased and most of the Lauan religious practices have been lost due to missionary influences, the basic structure of the eco-cultural arrangement apparently persists to the present in southern Lau.

Space would not permit a complete description of Lauan culture from the total ecological viewpoint even if the available data allowed it. It will suffice for our purpose to note certain aspects of the productive and distributive system in ecological context. The food problem looms large in this community on account of many interrelated factors. Among them are the frequency of drought and destructive hurricanes in the area, the scarcity and poor quality of garden land on the limestone islands, the fact that most manioc (staple of the limestones since its introduction) is inedible before it has been processed by a tedious operation to remove the poison, and the difficulty of preserving and storing food in the tropics under native conditions.

Under such circumstances we might expect the diet of the Lauans to be deficient both in quantity and in nutritional balance. No systematic studies of diet have been made in this area, but we note that to be satisfactory from the native viewpoint, a meal, or a feast must consist of two parts: 1. steamed "true food" (called *kana nichina*), namely a staple such as yam, breadfruit, sweet potato, manioc, or Tahitian chestnut (*Inocarpus edulis*); and 2. a boiled relish (called *mboro*) made of fresh green leaves, fish and coconut "cream," seasoned with bird's eye pepper. Pigs and sea turtle are feast foods. This pattern of diet requires little or no fresh water in a community where fresh water is exceedingly scarce, another adaptation to the environment. Moreover, it appears to be well-balanced from the nutritional viewpoint, the "true food" providing the bulk of carbohydrates, some proteins, fats, minerals and vitamins, while the relish furnishes proteins of superior quality and fat (i.e., from

[18] They set their clans up over those of the aborigines as a noble class, each clan having three species sacred to it, namely a tree, a fish and a bird. They required that their first-born males be regarded as sacred chiefs and be rendered tribute by the people in the form of first fruits. They developed a system of worshiping their warrior forefathers by means of hereditary priests in small temples.

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ripe coconut "cream,")[17] as well as certain indispensable vitamins and minerals found in fresh green leaves and red peppers. Furthermore, although food does not drop off the trees and rot on the ground (as it does on many Pacific islands—e.g., in Guam before the last war), the Lauan diet appears, under native conditions, to have been relatively adequate in quantity except in time of hurricane or drought.

The traditional diet of the Lauans is the result of a complicated and ingenious structure of attitudes, habits and institutions which function to develop and reinforce the basic ecology of the area according to the needs of its population, and to relate and adjust the community as a whole to the total environment. To gain some insight into this structure, let us begin with the daily menu. The Lauans eat only one main meal a day, at about sundown, and the major activities of both sexes are directed toward procuring and preparing the food for this meal. The men and boys of the household are responsible for the daily supply of "true food" for their own group and this they either raise in the household's garden land or collect from the bush. They then carefully prepare it, wrap it in leaves, place each package of food in the earth-oven pit on stones which have previously been heated, cover the whole with leaves and earth, and allow it to steam for at least an hour. The women and girls of the household, on the other hand, are responsible for the relish. They collect fresh green leaves daily—either edible leaves from the bush or sweet potato leaves from the garden. The women also collect shellfish on the reef or fish with nets in the lagoon and they clean the catch on the beach. Then, at the household kitchen huts, they pick leaves from stems, grate and strain the fatty flesh of ripe coconuts to make coconut "cream," and boil the mixture with fish and pepper in pots for at least an hour over a wood fire.

When both parts of the meal, the "true food" and the relish, are finally ready, they are combined and divided into shares, one for each member of the household according to rank, age and sex. Thus the two parts of the daily meal are always procured and prepared separately. Indeed, no woman is allowed near the earth-oven, which is strictly a male domain located some distance from the kitchen hut. This complementary and balanced sexual division of the rather time-consuming labor of meal-getting functions effectively toward insuring that the daily diet will be reasonably adequate, varied, and sufficient

[17] The proximate composition of "coconut cream" is: protein, 3.55%; fat, 33.15%; carbohydrate, 8.62%; calories per 100 grams, 347. (Concepcion, 1947). On this point, Emma Reh, nutrition officer, Food and Agriculture Organization of the United Nations, writes, "The protein content of 'coconut cream' is fairly high considering this is a liquid product. The protein is of good quality, like proteins of pulses, oily seeds and nuts, and superior to those of cereals, starchy roots and other vegetable foods. It is rich in most of the amino acids essential in nutrition. The fat content of the 'coconut cream' is also high, but the fat is low in the unsaturated fatty acids needed by the body. The requirements are however small, and probably met by fats contained in other foods." (Reh, 1948).